

What is claimed is:

1. A liquid crystal display device comprising:

thin film transistors, scanning signal lines, data signal lines which are arranged in a state that the data signal lines intersect the scanning signal lines, pixel electrodes which are connected to output electrodes of the thin film transistors, and common electrodes which form an electric field between the common electrodes and the pixel electrodes on one substrate out of a pair of substrates which are arranged to face each other with liquid crystal therebetween, wherein

in a pixel region which is surrounded by the neighboring scanning signal lines and the neighboring data signal lines, a metal heat diffusion member which is disposed in a spaced apart manner from the thin film transistor is provided,

the heat diffusion member has a projecting portion at a portion thereof which is remoter than a distance between the thin film transistor and the heat diffusion member, and

at least one of the projecting portions, the pixel electrodes and the common electrodes has superposed portions and at least one of the pixel electrodes and the common electrodes which are superposed on the projecting portions is formed of a transparent electrode at the superposed portion.

2. A liquid crystal display device according to claim 1, wherein a width of the projecting portions is equal to or wider than a width of the pixel electrodes or the common

electrodes at portions which superpose the projecting portion.

3. A liquid crystal display device according to claim 2, wherein the pixel electrodes are formed of a transparent electrode and the heat diffusion members and the pixel electrodes are superposed each other at the projecting portions.

4. A liquid crystal display device according to claim 3, wherein the heat diffusing members are formed on the same layer as the output electrodes of the thin film transistors and the heat diffusion members and the pixel electrodes are connected with each other via through holes formed in the heat diffusion members.

5. A liquid crystal display device according to claim 4, wherein the liquid crystal display device includes common signal lines and the heat diffusion members are superposed on the common signal lines, and the projecting portions of the heat diffusion members project from the common signal lines.

6. A liquid crystal display device according to claim 3, wherein the heat diffusion members also function as common signal lines.

7. A liquid crystal display device according to claim 2, wherein the common electrodes are formed of a transparent electrode and the heat diffusion members and the common electrodes are superposed each other at the projecting portions.

8. A liquid crystal display device according to claim 7, wherein the liquid crystal display device includes common

signal lines and the common signal lines also function as the heat diffusion members.

9. A liquid crystal display device comprising:

thin film transistors, scanning signal lines, data signal lines which are arranged in a state that the data signal lines intersect the scanning signal lines, pixel electrodes which are connected to output electrodes of the thin film transistors, and common electrodes which form an electric field between the common electrodes and the pixel electrodes on one substrate out of a pair of substrates which are arranged to face each other with liquid crystal therebetween, wherein

in a pixel region which is surrounded by the neighboring scanning signal lines and the neighboring data signal lines, a metal heat diffusion member which is disposed in a spaced apart manner from the thin film transistor is provided, and

the heat diffusion members are arranged in an isolated manner, and form superposed portions together with at least one of the pixel electrodes and the common electrodes.

10. A liquid crystal display device according to claim 9, wherein at least either one of the superposed pixel electrodes and common electrodes are formed of a transparent electrode.

11. A liquid crystal display device according to claim 1, wherein an inorganic insulation film and an organic insulation film are provided between a layer on which the heat diffusion members are formed and a layer on which electrodes which are

superposed on the heat diffusion members are formed, and the organic insulation film has a removal portion at at least one portions of the superposed portions between the heat diffusion members and the electrodes.

12. A display device being characterized in that the display device includes a metal heat diffusion member which is superposed on a lower layer of a transparent electrode by way of an insulation film, the heat diffusion member has a projecting portion at a portion thereof remoter than a distance between the heat diffusion member and the thin film transistor, and the heat diffusion member is superposed on the transparent electrode at the projecting portion.

13. A display device according to claim 12, wherein an inorganic insulation film and an organic insulation film are provided between a layer on which the heat diffusion members are formed and a layer on which electrodes which are superposed on the heat diffusion members are formed, and the organic insulation film has a removal portion at at least one portions of the superposed portions between the heat diffusion members and the electrodes.

14. A manufacturing method of a display device being characterized in that the method manufactures a display device which includes a metal heat diffusion member which is superposed on a lower layer of a transparent electrode by way of an insulation film, and the heat diffusion member has a projecting portion

at a portion thereof remoter than a distance between the heat diffusion member and the thin film transistor, wherein the heat diffusion member is superposed on the transparent electrode at the projecting portion, and the heat diffusion member and the transparent electrode are cut at the projecting portion so as to repair a short-circuit.

15. A manufacturing method of a display device according to claim 14, wherein the projecting portion and the transparent electrode are cut by heating the projecting portion with laser beams and, at the same time, the transfer of heat to the thin film transistor at the time of cutting is suppressed by the metal heat diffusion member.